This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.



#J XW

PATENT

ATTORNEY DOCKET NO.: PARSE-C2

CUSTOMER NO: 36038

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ln	Re	Ap	pli	icat	ion	of:	
NΛ	S	اريد	Δt	al			

Serial No. 09/768,414

Filed: 1/24/2001

For: SYSTEM AND METHOD FOR

PROGRAMMABLE ILLUMINATION

PATTERN GENERATION

Group Art Unit:

Examiner:

RECEIVED

TECHCON 2 5 2003

Commissioner for Patents PO Box 1450 Alexandria VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicants submit the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed (as checked below):

- __ within three months of the filing date of the above-referenced application
- __ within three months of the date of entry of the national stage in a § 371 application; or

X_before the mailing of a first Office Action on the merits for the abovereferenced application.

Copies of the listed documents, other than United States patents, are included.

Applicants respectfully request that the Examiner consider the listed documents and

indicate that they were considered by making appropriate notations on the attached PTO 1449 form.

N/A: English translations of the non-English documents are attached.

___ The following is a concise statement of the relevance of the non-English language documents.

___ In lieu of a statement of relevance or translation of the non-English language documents, an English language version of a search report from a foreign patent office in a corresponding application citing these documents and setting forth the relevance thereof is enclosed.

This submission does not represent that: (i) Applicant has read or analyzed any of the documents cited herein, except as otherwise provided; (ii) a search has been conducted; (iii) that no other documents exist which may be material to the examination of this application exist; or (iv) that any of the listed documents, or any part thereof, are material or constitute prior art under title 35 of the United States Code. Applicant reserves the right to present evidence and arguments to counter an assertion that any such documents are prior art, and/or to establish the patentability of the claimed invention.

Respectfully Submitted,

BY:

Eric P. Mirabel Reg. No. 31,211

Bioarray Solutions, Ltd. 35 Technology Drive Warren NJ 07059

(908) 226 8200 (ext 203)

Applicants) hereby petitions for any extension of time or for any other grounds needed to make this submission timely and proper. The Commissioner is hereby authorized to charge any fees due in connection with this submission and not otherwise covered by payment included herewith, or to credit any overpayment, to Deposit Account No. 502088.

I hereby certify that, on the date indicated below, this correspondence and all attachments indicated herein are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commisfioner for Patents, PO Box 1450, Alexandria VA 22313-1450

Bv.

Date: 6/20/93

3

Please type a plus sign (+) inside this box

(Use as many sheets as necessary)

SHEET

Under the Paperwork Reduction Act of 1995, no persons are required to

PTO/SB/08A (08-00)

Approved for use through 10/31/2002, OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE ond to a collection of information unless it contains a valid OMB control number.

	EMAR
INFORMATION DISCLOSURE	
STATEMENT BY APPLICANT	App
	Filir

Complete if Known olication Number: 09/768,414 ng Date: 01 24/200i

First Named Inventor: M. Seul, et al. / Group Art Unit:

Examiner Name:

Attorney Docket Number:

DARSE-	conZ	. 1500/560
777		

Examin	U.S. Documents	U.S. Patent	Date of Publication of Cited Document MM-DD-YYYY	
er Initials	Number	Document Name of Patentee or Applicant of Cited Document		
-	5,723,233	Garza et al.	2/1996	
	4,806,776	Kley	8/1985	
	6,141,046	Roth et al.	10/31/2000	
	6,018,350	Lee, et al.	1/25/2000	
	6,023,590	Abe, et al.	2/8/2000	
	6,025,905	Sussman	2/15/2000	
	6,123,263	Feng	9/26/2000	
	6,151,062	Inoguchi et al.	11/21/2000	
	3,948,525	Giglia	12/976	
	3,982,182	Hoga	A/1976	

	FOREIGN DOCUMENTS								
Examiner Initials		gn Patent Documents umber Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY		Translation			

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Notice of References Office Examiner ATURI Face Left 2	`		Notice of Peferance	WRIEN		09/7	68,414	SEUL, MICHAI	
Name			Notice of Reference	a Oued	7	Examiner	00/11.1	1 .	B7 (1-
County Cook-Number (Vind Cook) Name				2 2 2003		t		1641	Page Lot 12
A US-5,747,349			PA	10 2	GU.S. PA	ATENT DOCUM	ENTS		
A US-5,747,349	*		Country Code-Number-Kind Cook	MM-YYYXL	9		Name		Classification
F		Α	· · · · · · · · · · · · · · · · · · ·	8 9-1998	van der	n Engh et al.			T G E // A
F		В	US-5,900,481	05-1999	Lough e	et al.		Ten	AUG 536
F		С	US-6,133,436	10-2000	Koster	et al.		12/	7 CENT 536 2003
F		D	US-6,084,991	07-2000	Sampa	s		-	15 RafeOnia
F		E	US-5,442,246	06-1995	Koopal	et al.			435
H		F	US-	:					
US-		G	US-						
J US-		н	US-						
K US-		ı	US-						
L US-		J	US-						
M US- FOREIGN PATENT DOCUMENTS		К	US-						
FOREIGN PATENT DOCUMENTS * Document Number Code Date MM-YYYY Country Name Classification N WO 99/18434 64//5/99 PCT O WO 99/19515 04/2/24 PCT P Q R S S T NON-PATENT DOCUMENTS * Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) U W		L	US-			`			
Document Number Date MM-YYYY Country Name Classification		М	US-						
Country Code-Number-Kind Code MM-YYYY Country Name Classification			Dear-set Number		FOREIGN	PATENT DOC	UMENTS	· · · · · · · · · · · · · · · · · · ·	·
O WO 99/19515 O4/1/98 PCT P	×					Country	Name	•	Classification
P Q O R S INDICATE A CONTROL OF THE				I .		- T			
R S NON-PATENT DOCUMENTS * Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) U V W		N	WO 99/18434	04/15/99	P	<u>~ </u>			
R S S T NON-PATENT DOCUMENTS * Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) V W W		-	77	1 / 1/ 1	PC				
NON-PATENT DOCUMENTS * Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) V W		0	77	1 / 1/ 1	PC		-		
NON-PATENT DOCUMENTS * Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) V W		0 P	77	1 / 1/ 1	PC				
NON-PATENT DOCUMENTS * Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) V W		О Р Q	77	1 / 1/ 1	ρο				
Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) V W		О Р О R	77	1 / 1/ 1	PC				
V V W		O P Q R S	77	1 / 1/ 1					
v w		O P Q R S	WO 99/19515	04/2 Y=4	NON-F			.	
w w	*	O P Q R S	WO 99/19515	04/2 Y=4	NON-F			.	
	*	O P Q R S T	WO 99/19515	04/2 Y=4	NON-F			.	
x	*	O P Q R S T	WO 99/19515	04/2 Y=4	NON-F			.	
	*	O P Q R S T	WO 99/19515	04/2 Y=4	NON-F			.	

Application/Control No.

plicant(s)/(minutes)

A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



XX.	700 40	LEMY	7	
FOR	WAY.	PΤ	O-1	449

Attorney Docket:	Serial No.:	09/768.414
Applicant: Seul et al.		

INFORMATION DISCLOSURE CITATION

INFORMATION DISCLOSURE CITATION				100	200\ Group	RECEY	100
Examiner Initial	Patent Number	Publication Date	U.S. PAT	ENT DOCUMENTS Name	Class	AUG 2 5 20 CANGE TO	03 Filing Date
	5,281,370	01/25/94	Asher et		C.1.33	15000	ha Filling Date
	5,516,635	05/15/96	Ekins et				2900
	5,518,883	05/21/96	Soini			—	
	5,415,835	05/16/95	Brueck				
·····	5,604,097	02/18/97	Brenner				
<u> </u>	5,800,992	09/01/98	Fodor				
	6,023,540	02/08/00	Walt et a	1.			
	6,327,410	12/04/01	Walt et a	1.	.	 	<u> </u>
	6,266,459	07/24/01	Walt et a	l.			
	6 420 027	08/06/02	Changet	1	·		

		FO	REIGN PATENT DOCUMENT	S		· · · · · · · · · · · · · · · · · · ·
Examiner Initial	Patent Number	Publication Date	Country	Class	Sub-Class	Translation
	WO 93/02360	02/04/93	PCT			☐ Yes ☐ No
	WO 96/03212	02/08/96	PCT			Yes No
	1,248,873	01/17/89	Canada			Yes No
	WO 93/06121	04/01/93	PCT			Yes No
						Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, etc.)					
	Materials from Freedom of Information Act pertaining to David R. Walt				

Examiner		Date Considered	
	Initial if reference considered, whether or not citation is in conform Draw line through citation if not in conformance and not considered Include copy of this form with next communication to Applicant.	ed.	

Sheet 4 of 12

SERIAL NO.:
0 9/768, 414.

GROUP: AUG 2 5 2003

ECH ENTER 1600/2900 U.S. DEPARTMENT OF COMMERCE ATTY, DOCKET NO.: 42 FORM PTO-1449 PATENT AND TRADEMARK OFFICE PARSE-CONZ (REV. 7-80) LIST OF PRIOR ART CITED BY APPLICANT APPLICANT(S): SEUL, Michael (Use several sheets if necessary) FILING DATE: C 1/24/2001 PANEMETENT DOCUMENTS FILING DATE CLASS SUBCLASS NAME DATE **DOCUMENT NUMBER** *EXAMINER IF APPROPRIATE INITIAL 8/30/82 52 422 5 2 2/12/85 Fulwyler 0 9 AA 436 518 6/25/85 Nicoli et al. 3/3/87 7 5 4 AB 6125186 528 Walt 436 4/18/89 2 7 4 8 4 8 2 AC 7/20/89 6 2/19/91 Stavrianopoulos et al. 435 7 3 4 3 9 8 AD 10/24/88 6 435 6 7 3/26/91 Macevicz 2 5 0 8 ΑE 0 501 619188 436 Soini 5 7/2/91 8 5 4 0 2 AF 1/10/91 359 368 Betzig 5 4/14/92 5 3 0 5 1 0 AG 9/19/89 528 Walt 436 5/19/92 4 6 4 5 1 AΗ 11/13/89 501 436 2 2 4 2 7/21/92 Cheung 3 5 ΑI 82.09 9/4/90 422 Van Deusen et al. 7 7/21/92 3 2 0 9 5 1 AJ 2/2/89 436 501 Walt 5 3 9/1/92 5 3 AK FOREIGN PATENT DOCUMENTS TRANSLATION SUBCLASS COUNTRY CLASS DATE **DOCUMENT NUMBER** NO YES X C120 1/68 EP 618188 7 6 8 0 1/68 C120 EP 9 4/1/92 4 7 8 3 AM 0 X G01N 21/64 EP 7124196 7 2 3 1 4 R AN 0 33/546 GOIN 11/16/89 PCT 0 9 A0 8 X 33/536 **G01N** PCT 3 0 2 3 6 0 2/4/93 9 AP OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) Peterson, et al. "Fiber optic pH probe for physiological use," Anal. Chem. Vol. 52, 864-869 (1980) ΑQ Peterson, et al, "Fiber-Optic Sensors for Biomedical Applications," Science, 13: 123-127 (1984). AR Fuh, et al., "Single Fibre Optic Fluorescence pH Probe," Analyst, 112: 1159-1163 (1987). AS DATE CONSIDERED **EXAMINER** *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this

form with next communication to applicant.

FORM PT0-1449 ATTY. DOCKET NO.: 4 U.S. DEPARTMENT OF COMMERCE (REV. 7-80) PATENT AND TRADEMARK OFFICE LIST OF PRIOR ART CITED BY APPLICANT APPLICANT(S): SEUL, Michael (Use several sheets if necessary) AUG 2 2 2003 FILING DATE: Conec. 1/24/2001 U.S. PATENT DOCUMENTS *EXAMINER **DOCUMENT NUMBER** DATE NAME CLASS SUBCLASS **FILING DATE** INITIAL IF APPROPRIATE 8A 5 9 0 0 3/16/93 Cheung 427 213.31 11/8/89 88 5 2 4 8 3 9/14/93 Walt et al. 436 172 4/20/92 BC 5 2 4 4 6 3 6 9/14/93 Walt et al. 422 82.07 1/25/91 BD 5 2 5 0 2 6 10/5/93 Walt et al. 422 82.07 12/21/92 BE 5 2 5 2 4 9 10/12/93 Walt 436 528 3/30/92 BF 5 2 5 4 7 4 7 10/19/93 Walt 438 172 9/19/91 BG 5 2 9 7 8 4 1 3/29/94 Walt et al. 250 227.23 1/13/93 ВH 5 3 0 ß 6 8 1 4/26/94 Prober et al. 435 6 1/16/92 5 BI 3 0 8 1 4 6/14/94 Walt et al. 422 82.07 11/25/92 BJ 5 3 8 2 6 5 3 11/8/94 Carr et al. 436 165 5/6/92 5 ВК 0 5 7 8 4/11/95 Van Hoegaerden 436 523 2/25/93 FOREIGN PATENT DOCUMENTS **DOCUMENT NUMBER** DATE COUNTRY CLASS SUBCLASS TRANSLATION 3 YES NO BL 0 6 2 4/1/93 PCT C07H 21/00 X ВМ 9 2 4 3 5 1 7 12/9/93 PCT C07K BN 9 7 4 0 2 8 4/17/97 PCT GOIN 15/10 χ В0 ΒP OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) BQ Barnard, et al., "A fibre-optic chemical sensor with discrete sensing sites," Nature, vol. 353: 338-340 (1991). Campian, et al. "Colored and Fluorescent Solid Supports," Innovation and Perspectives in Solid-Phase Synthesis . Ed: E. Birmingham (Mayflower, London), pp. 469-BR 472 (1994). Pope, "Fiber optic chemical microsensors employing optically active silica microspheres," SPIE, vol. 2388 : 245-256 (1995). 88 **EXAMINER DATE CONSIDERED** *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

i	LIST LIY PI LIST LIY PI	HIOR AE				MI			SCOT	PARSE appeirantis): seul			1768,414 001VEC
AUG 2 2 2003									FILMS DATE: TECHCEM			G 2 5 2003 TER 1600/2900	
							RAI	PEMP	U.S. PATENT DOD	IMENTS			-17 1600/2900
EXAMINER ITIAL		DOC	JMENT	NUMBE	R	,	,		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	CA	5	4	8	p	,	2	1	Traine	Klainer et al.	428	441	5/17/94
	CB	5	1	1_	4	5	2	4	alsala a	Wall bi al.	436	518	12/14/95
	CC	5	4	8	6	9	8		3/0/01	Pope	250	227.21	1/3/94
	CD	5	5	1	3	4	9	ļė.	4/30/86	Mell of or	438	171	8/11/94
· · · · · · · · · · · · · · · · · · ·	CE	5	5	8	5	3	2	1	10/16/98	DIM p) al.	435	6	4/13/94
	CF	5	5	8	7	8	2	11	19/22/95	Letagen	436	518	11/5/93
	CG	5	0	3	1	7	2	14	137/11	King ot al.	358	445	8/29/95
	СН	5	8	3	3	9	7	li.	101101	Walt of al.	385	116	11/29/95
4	CI	5	8 11	5	Q	4	8		1123/07	larn at ol.	530	334	6/19/91
	C)	5	8	5	2	0	5		2129/97	Margel	428	403	1/25/95
	CK	5	6	7	4	8	9		1917197	Parling at al.	435	7.92	3/30/95
								f	REIGN PATENT	CUMENTS			
		рос	ŲMENT	NUMB	ER			# .%! 	DATE	COUNTRY	CLASS.	SUBUL ISS	TRANSLATION
								i i		Mark Mark			YES WE
	10	-	Τ	\Box	T	T	T	· }			_		
	CL	1	 	\vdash	+-	+-	+	-	and the second s	 	_		
	CM	+-	 	 	 	+	+	+-		 	- 		
	CO	+-		 	†	+	+	+			_		
	СР	1-	 		+-	†-	+-	+	-	†			
	i ur	+	-	 	 		٠	-	+	+		_1	

FORM PTO-1449 (REV. 7-80)	IST OF PA	IIOR AR	T CITE	n RY AI	PPIICA	PATE	DEPART ENT ANI	ATTY. DOCKET NO.: 40 MICHAEL PARSE - COND 0 9-1-768, 414 APPLICANT(S): SEUL, Michael FILING DATE: 10-100-12, 2000 1 24 (200) UMENTS						
•		veral sh			rul /				(C)	APPLICANT(S): SEUL, I	Michael	Ruc	VE	כל:
AUG 2 2 2003										FILING DATE: DETORE THE 2000 GROUP: 177/1604 600/0		\$ 5 2003 694 600/20	20.	
		<u> </u>					PAD	3000	I.S. PATENT DOC	UMENTS			450	U
*EXAMINER INITIAL		DOCUMENT NUMBER DAT								NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIA	
	DA	5	6	9	0	8	9 .	4	11/25/97	Pinkel et al.	422	68.1	5/23/95	
	OB	5	7	0	0	8	9	7	12/23/97	Klainer et al.	528	15	5/30/95	
	oc	5	7	7	9	9	7	6	7/14/98	Leland et al.	422	52	6/5/95	
	00	5	9	3	9	0	2	1_	8/17/99	Hansen et al.	422	55	1/23/97	
	DE	5	9	6	1	9	2	3	10/5/99	Nova et al.	422	68.1	9/30/96	
	DF	5	9	8	5	4	5	2	10/12/99	Kovacs	438	149	7/9/96	
	DG	6	0	4	8	6	9	0	4/11/00	Heller et al.	435	8	5/14/97	
	DH	6	0	9	0	5	4	5	7/18/00	Wohlstadter et al.	435	6	3/6/97	
	DI	6	0	9	0	9	1	2	7/18/00	Lebi et al.	530	300	11/23/98	
	DJ	6	2	0	0	7	3	7	3/13/01	Wait et al.	430	320	8/24/95	
	DK													
								FOI	REIGN PATENT D	OCUMENTS			•	
		000	UMENT	NUMBE	R				DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATIO	v
					_								YES	NO
	DL													
	DM													
	DN													
	00													
	DP													
						OTHER	PRIOR	ART (In	cluding Author, T	itle, Date, Pertinent Pages	, Etc.)			
	DQ	Egne	r, et al.,	"Taggi						d and fluorescent beads,"		pp. 735-738 (1997)		
	DR	i i								ystem," Clinical Chemistry			······································	
	DS	Scot	t et al.,	Proper	ties of f	luoroph	ores on			ations for screening, encod			anic & Medicinal C	hemistry
EXAMINER	Letters, 7:12, pp. 1567-1572 (1997). EXAMINER									DATE CONSIDERED				
*EXAMINER: Initia	ol if referer	nce cons	idered, v	whether	or not (citation	is in cor	nforman	ce with MPEP 60	9; Draw line through citat	on if not in confo	rmance and not con	sidered. Include c	opy of this

SERIAL NO. LIST OF PRIOR ART CITED BY A.R. A.R. LIST OF PRIOR ART CITED BY A.R. LIST OF PRIOR BY A.R. LIST OF	CONTRACTO IA										T				
APPLICANT(S): SEUL, Michael APPLICANT(S): SE			∩F PRJ	OR AJ	P	PATEN	MA TV	D TRA	ADEMA	COMMERCE ARK OFFICE	ATTY. DOCKET		1	21 15	1
MARCINITIAL DATE NAME CLASS SUBCLASS FILING DATE FAPROPRIATE						/	/ ~	jre	(All I	10 5		SEUL, Michael	HE	CEI	
SAMINER DOCUMENT NUMBER DATE NAME CLASS SUBCLASS FILING DATE FAPROPRIATE FAPROPRIA	AUG 2 2 2003										FILING DATE:	FILING DATE: Total PEOUP: 100 2 5 2003			103 103
MARCINITIAL DATE NAME CLASS SUBCLASS FILING DATE FAPROPRIATE									U.S.	. PATENT DO	CUMENTS			7	4900
EA			DOC	CUME	NT NI	JMBE	.R					1		FILING DATE	
EC		EA				<u> </u>									LINULE
ED		EB											 	 	
EE		EC											 		
EF		ED					Γ_		\Box				 		
Eq		EE												 	
EH		EF												 	
EI B B B B B B B B B B B B B B B B B B B		EG										 			
EI B B B B B B B B B B B B B B B B B B B		EH									 			 	
E		EI							\vdash						
EK							\vdash	 	 	 		+			
FOREIGN PATENT DOCUMENTS DATE DATE COUNTRY CLASS SUBCLASS TRANSLATION YES NO EL EM EM EN OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) EQ Healey et al., "Fiberoptic DNA sensor array capable of detecting point mutations," Analytical Biochemistry, vol. 251, pp. 270-279 (1997). ER "Microsphere Selection Guide," Bangs Laboratories, Inc. (Fisher, IN) (September 1998) EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 600. Data line above it is a few to the citation is in conformance with MPER 600. Data line above it is a few to the citation is in conformance with MPER 600. Data line above it is a few to the citation is in conformance with MPER 600. Data line above it is a few to the citation is in conformance with MPER 600. Data line above it is a few to the citation is in conformance with MPER 600. Data line above it is a few to the citation in the citation is in conformance with MPER 600. Data line above it is a few to the citation.									 						
DATE COUNTRY CLASS SUBCLASS TRANSLATION YES NO EL EL I I I I I I I I I I I I I I I I I		L-7-:-		<u></u>		<u> </u>	<u></u>	را ۲۰	COBEN	ON PATENT C			1		
EL			DOC	יוואEז	NT NI	IMBE			UKLK			7	T		
EL EL EM IN					1	/ITEL.	IX.			DATE	COUNTRY	CLASS	SUBCLASS		
EM		-	 ,	 -					·					YES	NO
EN EO OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) EQ Healey et al., "Fiberoptic DNA sensor array capable of detecting point mutations," Analytical Biochemistry, vol. 251, pp. 270-279 (1997). ER "Microsphere Selection Guide," Bangs Laboratories, Inc. (Fisher, IN) (September 1998) ESAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 600. Days like a base to find a sensor array capable of detecting point mutations," Analytical Biochemistry, vol. 251, pp. 270-279 (1997). DATE CONSIDERED		EL	\sqcup			ļ!	<u> </u>	<u> </u>	<u> </u>						
EQ Healey et al., "Fiberoptic DNA sensor array capable of detecting point mutations," Analytical Biochemistry, vol. 251, pp. 270-279 (1997). ER "Microsphere Selection Guide," Bangs Laboratories, Inc. (Fisher, IN) (September 1998) ES DATE CONSIDERED *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 600; December 1998 in the conformance with MPER 600; Decembe		ЕМ	\sqcup	1											
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) EQ Healey et al., "Fiberoptic DNA sensor array capable of detecting point mutations," Analytical Biochemistry, vol. 251, pp. 270-279 (1997). ER "Microsphere Selection Guide," Bangs Laboratories, Inc. (Fisher, IN) (September 1998) ES EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 600. Deput line than the first of the citation of the citation is in conformance with MPER 600. Deput line than the citation of the citation of the citation is in conformance with MPER 600. Deput line than the citation of the citation of the citation is in conformance with MPER 600. Deput line than the citation of		EN	<u> </u>]										
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) EQ Healey et al., "Fiberoptic DNA sensor array capable of detecting point mutations," Analytical Biochemistry, vol. 251, pp. 270-279 (1997). ER "Microsphere Selection Guide," Bangs Laboratories, Inc. (Fisher, IN) (September 1998) ES EXAMINER DATE CONSIDERED *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 600. Deput line the not a fact that is a fact to the citation of the citation is in conformance with MPER 600. Deput line the notation of the citation of the citation is in conformance with MPER 600. Deput line the notation of the citation of the citation is in conformance with MPER 600. Deput line the notation of the citation of the		EO	Щ			!	<u> </u>								†
EQ Healey et al., "Fiberoptic DNA sensor array capable of detecting point mutations," Analytical Biochemistry, vol. 251, pp. 270-279 (1997). ER "Microsphere Selection Guide," Bangs Laboratories, Inc. (Fisher, IN) (September 1998) ES EXAMINER DATE CONSIDERED *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the citation is in conformance with		EP	Ш												
EQ Healey et al., "Fiberoptic DNA sensor array capable of detecting point mutations," Analytical Biochemistry, vol. 251, pp. 270-279 (1997). ER "Microsphere Selection Guide," Bangs Laboratories, Inc. (Fisher, IN) (September 1998) ES EXAMINER DATE CONSIDERED *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the part of the citation is in conformance with MPER 600; Deput line the citation is in conformance with						OTHE	R PRIC	<u>OR AR</u>	T (Incl	luding Author,	Title, Date, Pertinent	Pages, Etc.)			-
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 600. Deput line above to see the constant of th		EQ	Heak	cy et al.									ochemistry, vol. 2	51. pp. 270-2	79 (1997)
EXAMINER DATE CONSIDERED *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 600. Deput line above to the conformance with MPER 600.		ER												21, pp. 210 21	13 (1371).
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPER 600. Deput line about 1.00.		ES										, , , , , , , , , , , , , , , , , , , ,			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant	EXAMINER								-		DATE CONSIDERED				
	*EXAMINER: Ir considered. Incl	nitial if re	eference	e consid	Jered,	wheth	er or n	ot citat	iion is i	n conformance	with MPEP 609; Dra	w line through	citation if not in c	onformance a	nd not

FORM PTO-1449 (REV. 7-80)						PATE			OF COMMERCE	ATTY. DOCKET NO.: 497. 1966 COMS SERIAL NO.: 09/7:687414				14
LI	ST OF PR Use se					- /	/ R AI	UG 2	2 2003	APPLICANT(S): SEUL, Michael				
(Use several sheets if necessary) AUG 2 2 2003										FILING DATE: GRAVE				
U.S. PATENT DOCUMENTS FCH C 2 5 20														
*EXAMINER INITIAL		DOCUMENT NUMBER DATE								NAME	CLASS	SUBELASSO 15	FILING DATE	ATE
	BA												~<500	
 	88										ļ <u>.</u>			
	BC												<u> </u>	
	BD								ļ					
	BE							_						_
	BF						<u> </u>	<u> </u>						
FOREIGN PATENT DOCUMENTS														
		DOC	DOCUMENT NUMBER DATE							COUNTRY	CLASS	SUBCLASS	TRANSLATIO)N
													YES	NO
	BG													
!	ВН													
	BI	ļ	<u> </u>											
						OTHER	PRIOR .	ART (In:	cluding Author, Ti	tie, Date, Pertinent Pages	. Etc.)			
	BJ	Trau	et al., "	Fiedld-Ir						ol. 272 : 708-709 (1996)				
	BK	ł								dulated Phases," <i>Science</i> ,		83 (1995)		
	BL	1								vith a Complementary DN			7-470 (1995)	
	ВМ	Haat		Single M						agments Separated by Ca				(No. 18) :
	BN	Rich	etti, et a	sl., <i>J. Ph</i>	ysique	lettr., v	ol. 45 : I	L-1137	to L-1143 (1984)					
	80	Sze,	"MIS Di	iode and	Charge	-Couple	d Device	s," The I	Physics of Semica	nductors, Chapter 7, pp.	362-430 (2° Editi	on) (Wiley Interscien	ce 1981)	
	BP													
	BQ										-			
	BR										-			
EXAMINER										DATE CONSIDERED				
*EXAMINER: Initia	al if refere	nce cons	idered, v	whether	or not (itation	is in con	nforman	ce with MPEP 60); Draw line through citat	ion if not in confo	rmance and not cons	sidered. Include o	copy of this

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE ATTY. DOCKET NO .: SERIAL NO .: 09/768,414 (REV. 7-80) PATENT AND TRADEMARK OFFICE RSB-CON LIST OF PRIOR ART CITED BY APPLICANT APPLICANT(S): SEUL, Michael (Use several sheets if necessary) AUG 2 2 2003 FILING DATE: **U.S. PATENT DOCUMENTS** *EXAMINER **DOCUMENT NUMBER** DATE NAME INITIAL AA 3 5 12/21/76 Giglia 350 160 AB 4 0 7 5 0 3 02/21/78 Ward et al. 96 09/13/76 1.5 AC 5 5 ĸ 3 06/26/84 Kawai et al. 204 180 08/25/82 ΔĐ 4 5 7 5 03/11/86 0 7 Diller 204 67 10/24/84 ΑE 4 5 9 1 5 5 0 05/27/88 Hafeman et al. 435 4 04/05/84 AF 5 4 4 3 3 0 08/22/95 Leventis et al. 313 506 02/18/93 AG 5 5 8 7 8 12/24/96 Wilding et al. 422 50 11/14/94 ΑH 5 9 8 3 9 2 03/12/96 Wilding et al. 422 68.1 09/19/94 ΑI 5 5 8 5 3 01/05/99 Trau et al. 204 484 11/26/96 AJ 6 0 3 3 7 03/07/00 Trau et al. 204 622 01/04/99 AK FOREIGN PATENT DOCUMENTS **DOCUMENT NUMBER** DATE COUNTRY CLASS **SUBCLASS TRANSLATION** YES NO AL 9 6 0 4 02/15/96 PCT G01N 27/00 X AM AN A0 OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) AR Yeh, et al., "Assembly of ordered colloidal aggregates by electric-field-induced fluid flow," Nature, vol. 386.6: 57-59 (1997) Giersig et al., Formation of ordered two-dimensional gold colloid lattices by electrophoretic deposition," J. Phys. Chem., vol. 97: 6334-6336 AS Seul et al., "Scale transformation of magnetic bubble arrays: coupling of topological disorder and polydispersity," Science, vol. 262: 558 - 560 (1993) AT **EXAMINER** DATE CONSIDERED *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE ATTY, DOCKET NO.: 400 SERIAL NO .: PATENT AND TRADEMARK OFFICE (REV. 7-80) PARCE-CON LIST OF PRIOR ART CITED BY APPLICANT APPLICANT(S): SEUL, Michael (Use several sheets if necessary) AUS 2 2 2003 (124/2001 100) FILING DATE: (**U.S. PATENT DOCUMENTS** *EXAMINER **DOCUMENT NUMBER** DATE NAME CLASS SUBCLASS INITIAL IF APPROPRIATE AA 7 5 5 01/05/88 Fulwyler 435 7 10/15/84 AB 5 5 7 3 9 0 9 11/12/96 Singer et al. 435 6 05/20/94 5 AC 5 8 0 12/17/96 6 9 Zanzucchi et al. 422 100 11/10/94 5 ΑD 5 9 3 3 8 01/14/97 Zanzucchi et al. 435 6 05/31/95 ż ΑE 5 7 2 3 1 8 03/03/98 Haugland et al. 428 402 06/07/95 AF 5 3 0 5 04/28/98 Fodor et al. 6 435 06/06/95 5 AG 8 0 5 09/15/98 **Ekins** 436 518 05/23/95 AH 5 3 7 8 5 5 11/17/98 Ekins 436 518 12/23/94 AI 5 7 2 8 1 9 02/23/99 Rava et al. 435 6 04/09/96 AJ 5 9 8 3 9 8 5 11/23/99 Dunlay et al. 7.2 02/27/97 AK 0 0 02/08/00 Walt et al. 12 03/14/97 -**FOREIGN PATENT DOCUMENTS DOCUMENT NUMBER** DATE COUNTRY CLASS SUBCLASS **TRANSLATION** YES NO AL 9 5 0 05/11/95 PCT GOIN 21/00 X AM 9 6 0 7 9 7 03/14/96 PCT GO1N 35/00 χ 9 7 AN 0 3 8 3 10/30/97 PCT GO1N 33/543 X ΑO 9 8 0 6 0 0 02/12/98 PCT G03F 7/00 X 5 3 3 0 0 11/26/98 PCT GO1N 21/00 X OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) ΑR Micheletto et al., langmuir, vol. 11, 3333-3336 (1995) Nagayama et al., Phase Transitions, vol. 45, 185-203 (1993) AS ΑT **EXAMINER DATE CONSIDERED** *EXAMINER: Initial if reference considered, whether or noc citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this for with next communication to applicant.

PTO/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1998 no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATIO	N DISCLOSURE
STATEMENT	BY APPLICANT

(Use as many sheets as necessary)

		 -	
SHEET	152	OF	11,
OFFICE	L		

Complete if Known									
Application Number: 09 (768, 414									
Filing Date: \(\sum_\sum_\tau'\)	1,00								
First Named Inventor: M. S. ul, et al. AUC									
Group Art Unit: 64	FC4 2520								
Examiner Name:	CENTER COOJ								
Attorney Docket Number:	1600/2900								

Examin	U.S. Documents	U.S. Patent Document Name of	Date of Publication of Cited Document
er Initials	Number	Patentee or Applicant of Cited Document	MM-DD-YYYY
	6,083,763	Balch	7/4/2000
	6,172,218 B1	Brenner	1/9/2001
	5,415,835	Brueck, et al.	5/16/1995
	6,429,027 B1	Chee et al.	8/6/2002
	5,532,128	Eggers et al.	7/2/1996
	5,516,635	Ekins et al.	5/14/1996
	5,961,923	Nova et al.	10/5/1999
	· .		

FOREIGN DOCUMENTS											
Examiner Initials	Foreign Patent Documents Office Number Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation							
	WO 00/04372	Anstyn, et al.	1/27/2000								
	WO 99/60170	Baier, et al-	11/25/1994								
	WO 98/40726	Walt, eral	2/8/2000								
	WO 00/03004	Fediteler, et al.	1/20/2000								
	WO 00/75373	Walt et al.	12/14/2000								

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.